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09/740,487	12/19/2000	Michelle Q. Wang Baldonado	D/99342	3504

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EXAMINER	
ZHEN, LI B	

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/740,487	WANG BALDONADO ET AL.	
	Examiner	Art Unit	
	Li B. Zhen	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-9,11,13,14,17,20-25,27-32,34 and 35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-9,11,13,14,17,20-25,27-32,34 and 35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1/30/06
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1,4-9,11,13,14,17,20-25,27-32, 34 and 35 are pending in the application.

Response to Arguments

2. Applicant's arguments filed 05/22/2006 have been fully considered but they are not persuasive. In response to the Non-Final Office Action dated 01/26/2006, applicant argues:

(1) Wydra does not perform at least the following steps of claim 1 "selecting a program, subsequent to receiving the job, which includes a first part and a second part, which may be used in executing the job; preparing a batch job by associating the selected program with the job; and, transmitting the batch job toward the batch job execution system". [p. 16];

(2) Wydra does not teach or suggest "transmitting the batch job (prepared by associating the selected program with the job) toward the batch job execution system", as required by claim 1. Wydra's transmitting a service request is not the same as transmitting a batch job (prepared by associating the selected program with the job) toward the batch job execution system, as required by claim 1 [pp. 16 – 17];

(3) Further, Wydra's transmission of a service request from the service broker of the ASF to the listener of the ASF is not a transmission of a batch job toward a batch job execution system. Rather, Wydra's transmission of a service request from the service broker of the ASF to the listener of the ASF is merely the transfer of a request (which is not a batch job specifically prepared as claimed in claim 1) from one portion of

an execution system to another portion of the same execution system. [p. 20, lines 21 – 31];

(4) Rutten does not teach or suggest that such sub-dividable processes are a part of a program that is selected and then associated with a job to thereby create a batch job that is transmitted toward a batch job execution system. Rather, Rutten is merely saying that a process for creating a document can be separated into sub-processes such as intake, collect information, edit, etc. [p. 20, lines 15 – 21];

(5) Column 11, lines 3-22 of Austin merely explains that a bus gateway device provides an interface between a host bus and a video bus by translating virtual addresses to real addresses. Austin does not teach terminating a unique address to end a session [p. 19].

In response to argument (1), examiner respectfully disagrees and submits that Wydra discloses determining which application server will execute the service requested by client [paragraph 7 – description]. The application server can be configured to provide the same or different service [paragraph 3 – description]. When the application servers provide different services, determination of an application server would include selection of a service object, which corresponds to selecting a program. As to associating the selected program with the job, Wydra discloses providing to the connection process an instruction to connection to the server, along with instruction to create an instance of the process of the object name to execute the service [paragraph 24 – description]. Therefore, Wydra maintains an association between the request

service request and the application server that includes the service object that will execute the service request.

In response to argument (2), examiner disagrees and notes that Wydra discloses that the ASF provides the ability to create and schedule batch services [paragraph 2 – description] and the job management feature allows users to create batch services [paragraph 57 – description]. In addition, the service request invokes execution of a flow that includes multiple operations [paragraph 19 – description]; therefore, the service request includes a series of operations.

In response to argument (3), examiner disagrees and submits that Wydra discloses the service request is transmitted to the listener 32 [col. 5, lines 54 – 67]. The listener resides on the application server, which collectively forms the batch job execution system. Although Wydra's transmission is transfer a request from a portion of an execution system to another portion of the same execution system, examiner notes that the claims as recited do not preclude transmission of a request from a portion of an execution system to another portion of the same execution system. In fact, claim 14 recites receiving at a first service provider of the batch execution system and transmitting the plurality of steps to be completed, from the first service provider toward the job management apparatus of the batch job execution system. The first service provider and the job management apparatus are different parts of the same batch job execution system. Therefore, Wydra teaches a transmission of a batch job toward a batch job execution system.

As to argument (4), examiner disagrees and submits that Rutten discloses a program including a plurality of steps [col. 3, lines 45 – 67], and each step identifies a service which is offered by the batch job execution system which can be used in executing at least a portion of one of the tasks of the batch job [col. 9, lines 10 – 18]. Rutten discloses that each task description lists the necessary software applications, especially the language technology application stored in language technology modules 12, 20, 21 the communications technology and the external software applications which may be accessed through I/O module 13 and which are needed to support the particular task. The description lists associates each task that is part of a batch job with software applications that are needed to support execution of a particular tasks. Therefore, the combination of Wydra and Rutten teaches applicant's invention as claimed.

In response to argument (5), examiner disagrees and submits that the signal transmitted after transfer is complete would allow system resources associated with the job to be released and this would include ending the session and terminating the unique address. For example, Austin discloses that after all documents have been received a job termination request is sent from the Protocol Services to the Connectivity Core and this request will be completed by the system, and the Protocol Service will release all resources associated with the job [paragraph 40 – description]. Release of resources would include ending the session that is associated with a unique address.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1, 4, 5, 8, 9, 14, 17, 20, 21, 24, 25, and 29 – 32, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent NO. 6,598,067 to Wydra [hereinafter referred to as Wydra] in view of U.S. Patent No. 6,632,251 to Rutten et al. [hereinafter referred to as Rutten], both references cited in the previous office action.**

5. As to claim 1, Wydra teaches the invention substantially as claimed including a method for preparing a job for execution by a batch job execution system [col. 3, lines 25 – 31], comprising the steps of:

receiving a job from an external source [client computers 22 request a service to be performed; col. 5, lines 54 – 67], wherein the job includes at least one task [col. 9, lines 64 – 67];

selecting a program, subsequent to receiving the job, which includes a first part and a second part [service 132 created by the ASF as a service inherited from the services object 134, in relation to other services 136, 138, 140 also inherited from the services object 134, Fig. 8; col. 11, lines 23 – 33], which may be used in executing the job [service broker 30 section of the ASF determines whether the application server 24

to which the client computer 22 is coupled can execute the requested service; col. 5, lines 54 – 67];

preparing a batch job by associating the selected program with the job [service broker 30 interfaces with the listener 32 section of the ASF residing on the application server 24; col. 5, lines 54 – 67]; and,

transmitting the batch job toward the batch job execution system [service broker 30 interfaces with the listener 32 section of the ASF residing on the application server 24, and transmits the service request to the listener 32; col. 5, lines 54 – 67].

6. Although Wydra teaches the invention substantially, Wydra does not specifically teach a job including a plurality of tasks.

However, Rutten teaches integrated software architecture for document processing [col. 2, lines 50 – 60 and col. 4, lines 14 – 20], part of a program including a plurality of steps [a process is subdivided into several sub-processes. Any of the sub-processes is subdivided into activities, each activity being relating to roles; col. 3, lines 45 – 67], wherein each step identifies a service which is offered by the batch job execution system which can be used in executing at least a portion of one of the tasks of the batch job [each task description lists the necessary software applications, especially the language technology application stored in language technology modules 12, 20, 21 the communications technology and the external software applications which may be accessed through I/O module 13 and which are needed to support the particular task; col. 9, lines 10 – 18], and wherein the second part of the program is for executing at least a portion of one of the tasks of the batch job [workflow application software:

governs authorization of users (identified in logon/logoff module 3) to carry out particular activities; col. 10, lines 23 – 37], and is further capable of generating additional steps to be executed by the batch job execution system in order to complete the task being executed [lists possible activities and sequence in which they may be carried out; col. 10, lines 23 – 37], wherein each additional step identifies a service which is offered by the batch job execution system which can be used in executing at least a portion of one of the tasks of the batch job [col. 9, lines 10 – 18].

7. It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of dividing a job into a plurality of tasks as taught by Rutten to the invention of Wydra because this allows a job to be broken down into tasks and provide support for each of these tasks with a variety of software applications [col. 2, lines 36 – 45 of Rutten].

8. As to claim 4, Wydra as modified teaches the program is selected from a plurality of programs stored in a library, wherein the programs are capable of being executed by the batch job execution system [primary application server determines which of the other applications servers or the primary application server should execute the service requested by a client computer 22, based upon which application server(s) is/are designated to execute the requested service; col. 12, lines 6 – 16 of Wydra].

9. As to claim 5, Wydra as modified teaches receiving a signal from the external source designating the program to be selected [based on the load balancer 148, the

listener 32 advises the connection controller 34 of the preferred application server 24; col. 12, lines 17 – 31 of Wydra].

10. As to claim 8, Wydra as modified teaches a method for preparing a batch job for execution by a batch job execution system [col. 3, lines 25 – 31 of Wydra], comprising the steps of:

receiving a batch job [client computers 22 request a service to be performed; col. 5, lines 54 – 67 of Wydra] comprising a plurality tasks [a process is subdivided into several sub-processes. Any of the sub-processes is subdivided into activities, each activity being relating to roles; col. 3, lines 45 – 67 of Rutten], by a first part of the batch job execution system [service broker 30 section, Fig. 6; col. 5, lines 54 – 67 of Wydra], wherein the batch job may be executed using a plurality of service providers [multiple application servers 24-1 through 24-M; col. 8, lines 35 – 54 of Wydra];

determining for the tasks of the batch job a service type [each task description lists the necessary software applications, especially the language technology application stored in language technology modules 12, 20, 21 the communications technology and the external software applications which may be accessed through I/O module 13 and which are needed to support the particular task; col. 9, lines 10 – 18 of Rutten], offered by a service provider of the batch job execution system, which may be used for performing the task [listener 32 maintains and refers to a file storing that information to identify the candidate application servers. Once the listener 32 has

determined the candidate application server(s) designated to execute the requested service; col. 12, lines 17 – 32 of Wydra];

creating at least one step for each of the plurality of tasks, wherein the steps comprise a first reference to the determined service type needed to perform the task [col. 9, lines 10 – 18 of Rutten], and a second reference to the task [provides to the connection controller the name of the application server 24 making the request for the process, along with the object name of the process; col. 7, lines 50 – 64 of Wydra];

determining an efficient way to organize the created steps for execution by the batch job execution system [listener 32 refers to the conventional load balancer 148...to determine which of the candidate application servers is most ideally suited--from an overall system load perspective--as a preferred application server to execute the requested service; col. 12, lines 17 – 31 of Wydra];

preparing a program which comprises the created steps, and the organization of steps for execution by the batch job execution system [service broker 30 interfaces with the listener 32 section of the ASF residing on the application server 24; col. 5, lines 54 – 67 of Wydra]; and,

transmitting the batch job and the prepared program toward a second part of the batch job execution system [service broker 30 interfaces with the listener 32 section of the ASF residing on the application server 24, and transmits the service request to the listener 32; col. 5, lines 54 – 67 of Wydra];

wherein the prepared program is for executing at least a portion of one of the tasks of the batch job [workflow application software: governs authorization of users

(identified in logon/logoff module 3) to carry out particular activities; col. 10, lines 23 – 37 of Rutten]; and is further capable of generating additional steps to be executed by the batch job execution system in order to complete the task being executed [lists possible activities and sequence in which they may be carried out; col. 10, lines 23 – 37 of Rutten], wherein each additional step identifies a service which is offered by a service provider which can be used in executing at least a portion of one of the tasks of the batch job [col. 9, lines 10 – 18 of Rutten].

11. As to claim 9, Wydra as modified, teaches a provider matrix that comprises: a list of services which are capable of being performed by the batch job execution system; and, a list of service providers which are capable of performing the services [a file storing that information to identify the candidate application servers; col. 12, lines 15 – 35 of Wydra].

12. As to claim 14, Wydra as modified teaches a method for preparing and executing a task of a batch job by a batch job execution system [col. 3, lines 25 – 31 of Wydra], comprising the steps of:

receiving at a first service provider of the batch execution system [multiple application servers 24-1 through 24-M; col. 8, lines 35 – 54 of Wydra] the task to be executed [client computers 22 request a service to be performed; col. 5, lines 54 – 67 of Wydra] from a job management apparatus [service broker 30 section, Fig. 6; col. 5,

lines 54 – 67 of Wydra] of the batch job execution system [col. 3, lines 25 – 31 of Wydra];

in response to receiving the task from the job management apparatus, creating a plurality of steps at the first service provider [a process is subdivided into several sub-processes. Any of the sub-processes is subdivided into activities, each activity being relating to roles; col. 3, lines 45 – 67 of Rutten], which must be executed by a plurality of other service providers in order to complete the task [provides to the connection controller the name of the application server 24 making the request for the process, along with the object name of the process; col. 7, lines 50 – 64 of Wydra];

transmitting the plurality of steps to be completed, from the first service provide toward the job management apparatus of the batch job execution system for execution [service broker 30 interfaces with the listener 32 section of the ASF residing on the application server 24, and transmits the service request to the listener 32; col. 5, lines 54 – 67 of Wydra], so that the job management apparatus can distribute the plurality of steps to a plurality of other service providers that will execute the plurality of steps [provides job scheduling across a single or multiple application servers; col. 4, lines 51 – 67 of Wydra];

receiving at the first service provider a plurality of results from the job management apparatus of the batch job execution system [notifies the client computer 22 requesting the service upon completion of the service; col. 6, lines 1 – 19 of Wydra] once the plurality of steps have been executed by a plurality of other service providers [col. 10, lines 23 – 37 of Rutten]; and,

preparing at the first service provider an output comprising the plurality of results [job management screen 150 displays the last time the service was performed, the next scheduled time the service will be performed, and the current status of each service that is available; col. 12, lines 43 – 60 of Wydra].

13. As to claim 17, Wydra as modified, teaches an apparatus for preparing a job for execution by a batch job execution system [col. 3, lines 25 – 31 of Wydra], comprising: a client [client computers 22-1 through 22-N; col. 5, lines 1 – 7 of Wydra], which is capable of receiving a job from an external source [col. 10, lines 50 – 55 of Wydra], wherein the job includes a plurality of tasks [a process is subdivided into several sub-processes. Any of the sub-processes is subdivided into activities, each activity being relating to roles; col. 3, lines 45 – 67 of Rutten], wherein the client is for: selecting a program which comprises a first part and a second part [service 132 created by the ASF as a service inherited from the services object 134, in relation to other services 136, 138, 140 also inherited from the services object 134, Fig. 8; col. 11, lines 23 – 33 of Wydra], wherein the program may be used in executing the job [service broker 30 section of the ASF determines whether the application server 24 to which the client computer 22 is coupled can execute the requested service; col. 5, lines 54 – 67 of Wydra]; preparing a batch job by associating the selected program with the job [col. 5, lines 54 – 67 of Wydra]; and, transmitting the batch job toward the batch job execution system [col. 5, lines 54 – 67 of Wydra]; wherein the first part of the program includes a plurality of steps, wherein each step identifies a service which is offered by the batch job

execution system which can be used in executing at least a portion of one of the tasks of the batch job [each task description lists the necessary software applications, especially the language technology application stored in language technology modules 12, 20, 21 the communications technology and the external software applications which may be accessed through I/O module 13 and which are needed to support the particular task; col. 9, lines 10 – 18 of Rutten] wherein the second part of the program is for executing at least a portion of one of the tasks of the batch job [workflow application software: governs authorization of users (identified in logon/logoff module 3) to carry out particular activities; col. 10, lines 23 – 37 of Rutten]; and is further capable of generating additional steps to be executed by the batch job execution system in order to complete the task being executed [lists possible activities and sequence in which they may be carried out; col. 10, lines 23 – 37 of Rutten], wherein each additional step identifies a service which is offered by the batch job execution system which can be used in executing at least a portion of one of the tasks of the batch job [col. 9, lines 10 – 18 of Rutten].

14. As to claims 20 – 21, these are rejected for the same reasons as claim 4 – 5 above.

15. As to claim 24, Wydra as modified teaches an apparatus for preparing a batch job for execution by a batch job execution system [col. 3, lines 25 – 31 of Wydra], comprising:

a service provider [multiple application servers 24-1 through 24-M; col. 8, lines 35 – 54 of Wydra], for: receiving a batch job comprising a plurality of tasks [a process is subdivided into several sub-processes. Any of the sub-processes is subdivided into activities, each activity being relating to roles; col. 3, lines 45 – 67 of Rutten], wherein the batch job may be executed using a plurality of service providers [col. 8, lines 35 – 54 of Wydra]:

determining for the tasks of the batch job a service type, offered by a service provider of the batch job execution system, which may be used for performing the task [listener 32 maintains and refers to a file storing that information to identify the candidate application servers. Once the listener 32 has determined the candidate application server(s) designated to execute the requested service; col. 12, lines 17 – 32 of Wydra];

creating at least one step for each of the plurality of tasks [col. 3, lines 45 – 67 of Rutten], wherein the step comprises a references to the determined service type needed to perform the task, and a reference to the task [provides to the connection controller the name of the application server 24 making the request for the process, along with the object name of the process; col. 7, lines 50 – 64 of Wydra];

determining an efficient way to organize the created steps for execution by the batch job execution system [listener 32 refers to the conventional load balancer 148...to determine which of the candidate application servers is most ideally suited--from an overall system load perspective--as a preferred application server to execute the requested service; col. 12, lines 17 – 31 of Wydra];

preparing a program which comprises the created steps; and the organization of the steps for execution by the batch job execution system [service broker 30 interfaces with the listener 32 section of the ASF residing on the application server 24; col. 5, lines 54 – 67 of Wydra]; and,

transmitting the batch job and the prepared program toward a job management apparatus [service broker 30 interfaces with the listener 32 section of the ASF residing on the application server 24, and transmits the service request to the listener 32; col. 5, lines 54 – 67 of Wydra].

wherein the prepared program is for executing at least a portion of one of the tasks of the batch job [col. 10, lines 23 – 37 of Rutten]; and is further capable of generating additional steps to be executed by the batch job execution system in order to complete the task being executed [lists possible activities and sequence in which they may be carried out; col. 10, lines 23 – 37 of Rutten].

16. As to claims 25, these are rejected for the same reasons as claim 9.

17. As to claim 29, Wydra as modified teaches an apparatus for preparing and executing a task of a batch job by a batch job execution system [col. 3, lines 25 – 31 of Wydra], comprising:

a service provider [col. 8, lines 35 – 54 of Wydra], which is capable of receiving the task [client computers 22 request a service to be performed; col. 5, lines 54 – 67 of

Wydra] to be executed from a job management apparatus [service broker 30 section, Fig. 6; col. 5, lines 54 – 67 of Wydra], wherein the service provider is for:

creating a plurality of steps [col. 3, lines 45 – 67 of Rutten] which may be executed by a plurality of other service providers in order to complete the task [provides to the connection controller the name of the application server 24 making the request for the process, along with the object name of the process; col. 7, lines 50 – 64 of Wydra];

transmitting the plurality of steps [col. 9, lines 10 – 18 of Rutten] to be completed toward the job management apparatus for execution [service broker 30 interfaces with the listener 32 section of the ASF residing on the application server 24, and transmits the service request to the listener 32; col. 5, lines 54 – 67 of Wydra];

receiving a plurality of results from the job management apparatus once the plurality of steps have been executed [notifies the client computer 22 requesting the service upon completion of the service; col. 6, lines 1 – 19 of Wydra]; and,

preparing an output comprising the plurality of results [job management screen 150 displays the last time the service was performed, the next scheduled time the service will be performed, and the current status of each service that is available; col. 12, lines 43 – 60 of Wydra].

18. As to claim 30, Wydra as modified teaches an article of manufacture including an information storage medium wherein is stored computer readable information comprising: a client software component [client computers 22-1 through 22-N; col. 5, lines 1 – 7 of Wydra] for: receiving a job from an external source [col. 10, lines 50 – 55

of Wydra], wherein the job includes a plurality of tasks [col. 3, lines 45 – 67 of Rutten] that may be executed using a plurality of service provider software components [col. 8, lines 35 – 54 of Wydra];

selecting a program software component which references at least one of the plurality of service provider software components [col. 5, lines 54 – 67 of Wydra];

preparing a batch job software component by associating the selected program software component with the job [col. 5, lines 54 – 67 of Wydra]; and,

transmitting the batch job software component toward a job management apparatus software component [col. 5, lines 54 – 67 of Wydra],

wherein the first part of the program includes a plurality of steps, wherein each step identifies a service which is offered by the batch job execution system which can be used in executing at least a portion of one of the tasks of the batch job [each task description lists the necessary software applications, especially the language technology application stored in language technology modules 12, 20, 21 the communications technology and the external software applications which may be accessed through I/O module 13 and which are needed to support the particular task; col. 9, lines 10 – 18 of Rutten] and

wherein a second part of the program is for executing at least a portion of one of the tasks of the batch job [workflow application software: governs authorization of users (identified in logon/logoff module 3) to carry out particular activities; col. 10, lines 23 – 37 of Rutten]; and is further capable of generating additional steps to be executed by the batch job execution system in order to complete the task being executed [lists

possible activities and sequence in which they may be carried out; col. 10, lines 23 – 37 of Rutten], wherein each additional step identifies a service which is offered by the batch job execution system which can be used in executing at least a portion of one of the tasks of the batch job [col. 9, lines 10 – 18 of Rutten].

19. As to claim 31, Wydra as modified teaches an article of manufacture including an information storage medium wherein is stored computer readable information comprising:

a service provider software component [multiple application servers 24-1 through 24-M; col. 8, lines 35 – 54 of Wydra], which offers a service of conversion planning [job scheduler 36; col. 5, lines 7 – 26 of Wydra], wherein the service provider software component is for: receiving a batch job software component [col. 5, lines 54 – 67 of Wydra];

separating the batch job software component into a plurality of tasks [building a schedule of services to be executed using the schedule controller 36; col. 6, lines 43 – 54 of Wydra], wherein the tasks may be performed by a service provider software component of a batch job execution system [col. 8, lines 35 – 54 of Wydra];

determining for each of the plurality of tasks a service type [col. 9, lines 10 – 18 of Rutten], offered by one of the service provider software components, which may be used for performing the task [col. 12, lines 17 – 32 of Wydra];

creating at least one step for each of the plurality tasks [col. 3, lines 45 – 67 of Rutten], wherein the steps comprise a references to the service type needed to perform the task and a reference to the task [col. 7, lines 50 – 64 of Wydra];

determining an efficient way to organize steps for execution by the batch job software component [col. 12, lines 17 – 31 of Wydra];

preparing a program software component, which comprises the steps and information designating the organization of the steps for execution by the batch job software component [col. 5, lines 54 – 67 of Wydra]; and,

transmitting the batch job software component and the program software component toward a job management apparatus [col. 5, lines 54 – 67 of Wydra], wherein the program software component is for executing at least a portion of one of the tasks of the batch job software component [workflow application software: governs authorization of users (identified in logon/logoff module 3) to carry out particular activities; col. 10, lines 23 – 37 of Rutten]; and is further capable of generating additional steps to be executed by the batch job software component in order to complete the task being executed [lists possible activities and sequence in which they may be carried out; col. 10, lines 23 – 37 of Rutten], wherein each additional step identifies a service which is offered by the batch job software component which can be used in executing at least a portion of one of the tasks of the batch job software component [col. 9, lines 10 – 18 of Rutten].

20. As to claim 32, this is rejected for the same reasons as claim 25 above.

21. As to claim 34, Wydra as modified teaches wherein the first part of the program also includes: information about data dependencies between the steps, so that the batch job execution system can determine whether an output of one of the tasks associated with a first one of the steps is needed as an input for a second one of the steps, and thus whether the second step can be started before the first step [keeps tracking information in the tracking database 19, e.g. how much process time has been spent, which information has been stored in the databases; col. 10, lines 32 – 36 of Rutten].

22. As to claim 35, Wydra as modified teaches wherein the first part of the program also includes: information about data dependencies between the steps, so that the batch job execution system can determine whether an output of one of the tasks associated with a first one of the steps is needed as an input for a second one of the steps, and thus whether the second step can be started before the first step [keeps tracking information in the tracking database 19, e.g. how much process time has been spent, which information has been stored in the databases; col. 10, lines 32 – 36 of Rutten].

23. **Claims 6, 7, 11, 13, 22, 23, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wydra and Rutten further in view of U.S. Patent NO. 5,781,711 to Austin et al [hereinafter Austin, cited in the previous office action].**

24. As to claims 6 and 7, Wydra as modified does not teach identifying input and output type.

However, Austin teaches receiving a first signal from the external source, which identifies the input type of information included in the job [a compound segment is defined, herein, as each pair of input/output designations used to describe the processing of a job; col. 11, lines 35 – 47];

receiving a second signal from the external source, which identifies the desired output type of information to be obtained when the job has been executed [attributes serve as directives for the printing system 10 indicating the manner in which a job copy is inputted and/or outputted; col. 11, lines 60 – 65]; and,

wherein the step of selecting a program is in response to receiving the first and second signal [each compound segment or frame, two tickets, namely an input ticket and an output ticket, are programmed to provide suitable information to the printing system regarding the input/output attributes of the job; col. 12, lines 1 – 19].

25. It would have been obvious to a person of ordinarily skilled in the art at the time of the invention to apply the teaching of identifying input and output type as taught by Austin to the invention of Wydra as modified because provides a protocol service that can translate different types of requests from remote hosts into a common format [col. 15, lines 15 – 20 of Austin].

26. As to claim 11, Wydra as modified teaches a method for preparing and executing a task of a batch job by a batch job execution system [col. 3, lines 25 – 31 of Wydra], comprising the steps of:

receiving the task of the batch job which is to be executed by a service provider [service 48 receives from the service broker 30 requesting the service 48 a callback instruction; col. 8, lines 21 – 29 of Wydra];

making a call to start a session with a remote platform, in response to receiving the task [internet connection module 18; col. 3, lines 20 – 28 of Rutten];

making a call to put, subsequent to making a call to start a session, which transfers at least a portion of the information in the task to be executed to the remote platform [col. 5, lines 54 – 67 of Wydra];

making a call to convert, subsequent to making a call to put, which instructs the remote platform to perform a function on the information transferred to the remote platform [col. 15, lines 15 – 20 of Austin];

making a call to get, subsequent to making a call to convert which retrieves the converted information from the remote platform [Connectivity Core will translate this request into a DPA-compatible format and forward it to the DM subsystem; col. 14, lines 11 – 23 of Austin];

repeating each step of making a call to put, convert and get until the task is completed [After the document has been accepted, the Protocol Service starts to receive data from the underlying protocol stack and writes it into the I/O descriptor; col. 14, lines 23 – 36 of Austin]; and,

making a call to end the session with the remote platform [internet connection module 18; col. 3, lines 20 – 28 of Rutten];

wherein each of the above steps are performed by the service provider [col. 14, lines 23 – 36 of Austin],

wherein the step of making a call to start a session further comprises creating a unique address which identifies the session [provides VBus address translation for accesses to address spaces in the VBus real address range, and passes a virtual address to the host SBus for virtual addresses in the host address range; col. 11, lines 3 – 22 of Austion]; and

the step of making a call to end the session terminates the unique address [a transfer is complete, the interface 40 transmits a signal back to the system controller 44 so that further information, such as desired packet size and address designations, can be obtained; col. 8, line 62 – col. 9, line 2 of Austion].

27. As to claim 13, Wydra as modified teaches the remote platform is operating on a Windows based machine [col. 9, lines 40 – 45 of Wydra]; and the service provider is operating on a UNIX based machine [col. 16, lines 6 – 13 of Austin].

28. As to claims 22 and 23, these are rejected for the same reasons as claims 6 and 7 above.

29. As to claims 27 and 28, these are rejected for the same reasons as claims 11 and 13 above.

Conclusion

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

CONTACT INFORMATION

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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LBZ

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